

CACTUS AND SUCCULENT JOURNAL

Of the Cactus And Succulent Society
Of America

Vol. XVII SEPTEMBER, 1945 No. 9



FIG. 78. Hummel's hybrid of *Crassula Justicorderoyi* blooms off and on throughout the year. Easy to grow in pots and forms large, thick clumps. Haselton photo x .3



CACTUS AND SUCCULENT JOURNAL

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Vol. XVII

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FIG. 79. The Commercial Exhibits of Austin, Henze, and Bantel at the Spring Flower Show of the St. Louis Horticultural Society, May, 1945. The succulent exhibits were sponsored by the Henry Shaw Cactus Society. Mrs. L. A. Frank captured sweepstakes.

A UNIQUE PREHISTORIC IRRIGATION PROJECT is the subject of a paper prepared by fellow member Henry C. Shetrone of the Ohio State Archaeological and Historical Society. Phoenix, Arizona, is mentioned as the "hub of the Canal Builders" where irrigation has turned the desert into a garden spot. The earliest builders have been traced back to around 100 A.D. Those who have traversed the cactus land of the southwestern deserts can appreciate the struggles of a primitive race. Mr. Shetrone concludes his paper with the following:

"Today there remain only the old canals and the ruins of once impressive communal structures—mute evidences of a people who had carried the human experiment, through trial and error, to a level which must command the admiration of all discerning men; a people who, but for a natural calamity with which they could not cope, and because of the rapacity of unscrupulous and hostile neighbors, might have borne

the torch of civilization to undreamed-of heights. The construction of a million dollar irrigation system, representing a high degree of engineering skill, attests to their energy, strength, courage and initiative.

"Our culture of today is complex, while theirs was simple; but who would venture to say that ours is 'higher' or better? We, as were they, are still beset with the threat of natural calamity, and by 'man's inhumanity to man.' The first of these is nothing as compared to the latter, which now has precipitated all mankind into a holocaust such as the world never has known, the aftermath of which conceivably might be more disastrous than the titanic struggle itself.

"The only criterion which justifies an assumption that one culture is higher or better than another, is proof that it provides a larger measure of cooperation, usefulness, spirituality, morality—and human happiness!"

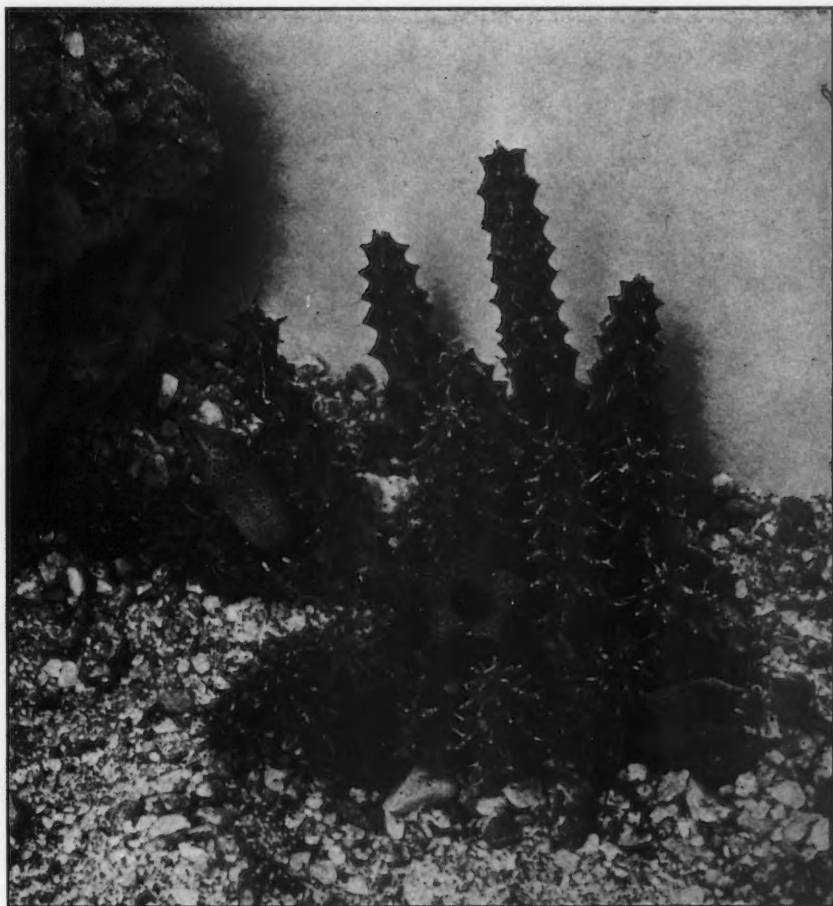


FIG. 80. *Stapelianthus Decaryi* Choux approx. nat. size

A Madagascar Stapeliad

By J. R. BROWN

It is gratifying to note that a large number of the amazing collection of plants of the *Stapeliaceae*, introduced by White and Sloane for purposes of study during the time they were preparing their monograph, are being grown by some of the dealers in succulent plants and are not, as is so often the case when a representative group of plants is assembled for study, becoming entirely lost to cultivation.

Recently *Stapelianthus Decaryi* Choux was seen growing very luxuriantly and also flowering freely, the illustration shows a small portion of a mat of several dozen stems. A bud, a flower fully open and a flower fading are shown on this

particular portion of a plant. The flowers are not too numerous but seem to continue to appear during a considerable period of time, May, June, and July, and probably longer. Unlike many plants of the *Stapeliaceae*, which seem to bear the flowers more or less on the outer stems of the plant, the flowers of this *Stapelianthus* seem to be scattered thinly throughout the mass of stems and are thus held more or less erect by the surrounding stems.

The genus *Stapelianthus*, as stated in the *Stapeliaceae* by White and Sloane, was erected by Prof. Pierre Choux to include two small Stapeliads from that island of many inter-

esting and little known succulent plants, Madagascar. The first known member of the genus, *Stapelianthus madagascariensis* was discovered in 1931 by Raymond Decary, who in the following year also discovered *Stapelianthus Decaryi*, and which bears his name.

At first glance *Stapelianthus Decaryi* is taken to be a *Huernia*, but the genus *Stapelianthus* differs from *Huernia* by the outer corona arising from the staminal column in an erect-diverging crown, the separate lobes free to the base and deeply cleft above into comparatively slender segments and adnate at the base to the inner corona-lobes.

The flowers of *S. Decaryi* which have a tubular corolla are quite distinct from those of *S. madagascariensis*, in which the corolla is campanulate.

Due to the courtesy of Mr. Harry Johnson of Hynes, I was able to secure the photograph shown in the illustration.

EPIPHYLLUM NOTES

From *Kakteenkunde*, July, 1892, Vol. II, No. 2
Translated by ED. GUEGUEN

FORUM

By EDMUND BISCHOF

Many cactus fanciers here and in this vicinity generally complain in cultivating *Phyllocacti** that they so often receive from cactus dealers kinds which they already possess. This is because *Phyllocacti* are too little known to them by name and the differentiating characters of the branches are often insufficient for the novice due to the lack of technical information.

Why would it not be possible for a hybridizer of *Phyllocacti* to give a basic description of the plants in their valuable supplements and general catalogs, for example Hildmann, Lorenz, Haage & Schmidt, Liebner, and especially upon the flower characters:

1. Blooming season.
2. Difficulty or ease of flowering.
3. Growth.
4. Soil.
5. Size of flower in diameter and length.
6. Scale structure and bracts of flower-tube.
7. Spination of same.
8. Location of flower.
9. Color of same.
10. Odor.
11. Color, seat and length of filaments.
12. Color, seat and length of pistil.
13. Color of petals.
14. Shape, spination and color of plant.
15. Information as to suitable location, sun or half shade.

*EDITOR'S NOTE: Used in Europe to denote the hybrids. S. E. H.

16. Watering.

17. Wintering: cold or warm.

May I request that in your magazine, you publish the above, and perhaps through a color chart using lines or squares the various color shades might be made known to correspond with their names.

Then allow me to please ask these questions:

1. Why is it that more dark-red *Phyllocacti* are flowering this year a brighter almost brilliant color?

2. For another novice and for myself, flowers are appearing on *Phyllocactus Ackermannii* and *P. multiflorus*. As these flowers were strewn with bracts about 1½ inches long, they suddenly changed into strong young leaf-growths, these also retaining the bracts. Why?

Comment of the editorial staff. In no other cactus genus is hybridization carried on with such horticultural success as with the few true species of *Phyllocacti*. Likewise nomenclature is in none other more confused. We are in accord with the contributor's suggestions and are giving them publicity. It would please us if a satisfactory solution could be worked out. Every single cactus scholar is invited to participate in this task. Moreover, we send out a plea to the efficient professional growers to help in setting up such a digest.

EDITOR'S NOTE: Fifty years ago they had the same questions that are confronting us today. With the release of the new *Epiphyllum* book this coming November and the renewed activities of the American *Epiphyllum* Society, we can expect a clarification of many of these problems. No doubt Mr. Bischof means scales when he mentions "bracts" but what can he mean by "leaf-growths?" S. E. H.

FROM EUROPE

Capt. A. A. Bernhardt's next address will be Brooklyn, N. Y. He will have many interesting experiences to report.

Mrs. A. B. Rose of Kansas City reports the following about our Sgt. Robert Rose "who now has the Bronze Star." When V-E Day came Robert was with General Patton's Third Army in Czechoslovakia. They were with Czech families who treated them as one of their own family and made the boys take their beds. The lady where Bob stayed, "Mom" as they called her, was very interested in cacti and insisted Robert give her pictures of our cacti in our collection. So he got a nice folder and put the JOURNALS he had in it and gave them to her. She was very proud of them and while she can't read them she enjoys the pictures. She in turn gave him a hand-embroidered handkerchief and a highly colored wooden bowl and said "For Mamma" and I in turn am very proud of them.

Sgt. Jim Fowler, former Assistant Editor of the JOURNAL, is evidently conducting a PX called "Jim's Cozy Corner" at 20 Lucius Strasse, Frankfurt. His program for Thursday night was "Cactus Society and Igorot Miners Night!"

AFFILIATE NOTES

Please mail your Affiliate Notes to Chas. A. Place, 5048 Hook Tree Road, Rt. 1, Box 388T, La Canada, California.

Now that the late little unpleasantness is over and we may look a gas station in the face, it is about time to polish up our labels and "go places," and "see things."

Who said Convention in 1947???

Clara M. Hogue (Cor. Sec.) writes:

"The K.I.O. Cactus Club held their last meeting at the home of Mrs. B. Cook. A very interesting meeting took place and plans were formulated to conduct a radio program on cacti. Plans were also made to display cacti at the Carthage Fair in September."

From Lloyd Combs (President) K.I.O.:

"The social meeting in honor of Charles and Mildred Cole took place as scheduled and I can assure you the greetings from you and the other California members were a real surprise to the Coles. Their interest in the cactus hobby came to the front as usual when Charlie combined reminiscences of their wedding twenty-five years ago with recollections of the founding of the K.I.O. Club. I feel that an occasional social meeting such as this can do a great deal to keep a club active and in a progressive spirit, and I am looking forward to the *big meeting*—the Convention of 1947 (?) which holds so much in prospect for all cactophiles."

K.I.O.—Konvention in Ohio!

E. Worthington (President) writes:

"The Amateur Cactus and Succulent Society of British Columbia, visited two of the members' collections, those of Mr. T. C. White and Mr. A. H. Gingell. Mr. White had a most wonderful showing of *Lobivia* and *Rebutia* blooms with a few other varieties in flower to make weight. Both Messrs White and Gingell have no heat in their greenhouses with the result that plants are kept in the basement for the winter, being kept cool and dry, then brought out to the greenhouse in the spring and watered up and the flowers appear. A good advertisement for this system of growing. At the June meeting Miss A. R. Gilbert read us a paper on 'Succulent Euphorbias,' illustrated with some very fine specimens from the collection of Mr. Marchanton. The highlight of the July meeting was our Second Annual Parlor Show. It was much better than our last. There were over fifty entries in the fourteen classes, ten members taking part. We have been so busy with the plans for and then the Show, that we have not yet got the 'Cereusly Speaking,' discussion group under way, however it will come. We have heard from our friend, Mrs. Channing of Trail, and she tells us that she feels quite 'perked up,' about her plants as they look so much better than when she was down on the coast."

From now on, bigger and better Shows.

G. W. van der Bundt (Cor.) writes:

"The Cactus and Other Succulent League of Oakland, held their meeting at the Units Headquarters at the home of W. Andrews. Order of the day was nominating of Officers for the coming year. The present officers were renominated without opposition: Al Tresler, President; John Schrender, Vice-President; W. Andrews, Treasurer; John Hastings, Secretary. Mr. Butterfield led a discussion on the Genus *Crassula* and allied plants."

Success to the new Officers.

Dorinda L. Bright (Pub.) writes:

"The Southern California Cactus Exchange met for the July meeting in the garden of one of the members, Mrs. Mead, the custom of meeting in various private gardens in the summer, which has been followed for

years. We are able in this way to get around and see the various members' collections and methods of care and cultivation. Mrs. Mead's garden, though small, was very well kept and orderly and she can boast of some fine specimen plants. Our bulletin, which we issued for many years, but dropped when the war interfered, made its first appearance this month and the membership voted to carry on with it. We also voted to increase our dues to \$1 per year per member. Our program, provided by one of our own members, Mr. Homer Rush, was on succulents as house-plants. He brought a number of specimens and told of the native habits, something of their care, and of their usefulness as house plants. He spoke chiefly of the *Kalanchoes* and *Bryophyllums*, showing a wide knowledge of his subject and questions that he answered. We will meet two- or three times this summer in private gardens."

Every bit of space in Mrs. Mead's garden was utilized to the best advantage.

The Los Angeles Cactus and Succulent Society held their August meeting at the gardens of Mr. R. W. Kelly. Mr. Kelly with his perennial smile made an ideal host. In addition to the display of commercial plants there were many fine specimen plants to be seen in his private collection.

From the Bulletin of the Heart of America Cactus and Succulent Society, Mary Lee Womack, Editor:

The June meeting was at the home of Mr. and Mrs. Espenlaub. No meetings during July and August, the write-up about the hail storm was most interesting, also Sgt. Robert Rose's description of seven days travel through some of the devastated area in Germany.

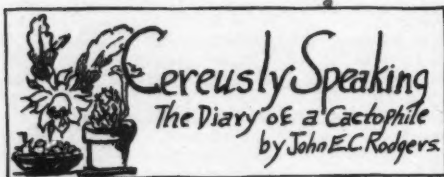
From the "Cactus Digest," Ladislaus Cutak, Editor, Henry Shaw Cactus Society:

"The July meeting was a gala anniversary celebration and from the reading, topped all previous birthdays. From their Radio Quiz, 'Quiz of Two Cities,' featuring the Henry Shaw Cactus Society versus the Better Gardens Club, Henry Shaw Cactus Society scored 135 points against the other Club's 115 and thus enriched their Library Fund by \$59.

"Cactographs," by Ladislaus Cutak, Editor of the Cactus Digest:

"Not so long ago I received a small parcel of New Mexican cacti from Miss Violet Munger and in the lot were a few specimens of the interesting *Coryphantha vivipara*. This species has a very wide distribution and grows in many of the central and west central states of our country. It also grows in Canada, in two or three of its provinces. Miss Munger's plants were collected by Mrs. Clara Butler about 38 miles east of Albuquerque, where they grew mostly under cedar. This spiny pincushion is globular in outline, its body or stem composed of elongated, mostly ascending, gray-green tubercles. Areoles are large and woolly at first, filled with a cluster of whitish radial spines and four much stouter, brownish centrals. Three delicate deep pinkish flowers appeared in the crown and opened and closed for four successive days. However, the petals were not fully unfurled until late in the afternoon, despite the fact that sun shone brilliantly much earlier. At 5 o'clock the flowers began to close. The sepals were lanceolate, pale green, and ciliate while the petals were entire, spreading and rose pink, deeper in the upper half, fading in the lower. The style was pale greenish white, topped by nine linear, whitish to pale pinkish stigma lobes. Stamens were mostly white with orange anthers but the filaments in the uppermost or outermost circle were light purple in color. There was a little fragrance detected about the flowers."

The Beverly Hills Cactus Club have decided to hold no meetings during July and August.



September 1. Still recommending those two excellent books "Cacti for the Amateur" and "Succulents for the Amateur" to my correspondents who ask for something practical. They are two of the most used in my library. *Faucarias* (species and hybrids) budded. A delightful family to add to your collection. I was the proud possessor of *Faucarias: albidens, militaris, tigrina, tuberculosa* and *bosscheana* until "happy events" from "tuberculosa" convinced me that names were "relative" (or first cousins). The offspring have bloomed, set seeds and now I'm convinced as they come up that again I'm possessor of "crosses" from any one, if not all again.

September 3-4. Had ten out of towners visit me. Labor Day was right, but since they were admirers of this yer cactophile as well as his spiny brutes, I loved them. Spent much time in the Cactus House and under the grape arbor marveling at the intricate spine patterns, leaf scars and succulent colors which I showed them. It is always a confession of faith when I realize the beauty there is to be found even in that common one, *Kleinia articulata*. In fact my three favorites for stem markings are *Kleinias articulata, pendula* and *anteuphorbium*. If you have finer patterned stem markings tell us, too.

September 7. *Chiapasia nelsonii* now has reached the awkward stage, five stems, which make more impression on cactophiles. Not so me, as I've literally nursed the small stem cutting through its growing pains. E. J. Fish, Strongville, Ohio "wonderman of the rockies" thinks it is over-rated and of little interest. I'm a *Rhipsalis* and allied genus collector, so it's tops with me. No battle scheduled, "Epiphytes vs. Alpines."

September 10. *Epiphyllanthus obovatus* had to be supported by a wire frame. Getting pendant. Former bushiness not as noticeable, as it has a tendency to shed stems or joints much the same as its cousins, *Schlumbergera* and *Zygocactus* when kept too dry or in too dry air. Doesn't seem to resent dryness at the root except during the growing season. Keep the air moist about the plants as the thread-like connections of the stems and buds are fragile. Epiphytes—yes!

September 12. *Euphorbia splendens* full of its exquisite blooms. Plant graceful when left to grow naturally. More beautiful if ends of limbs are clipped off to make it branch out at tips. (Growers do this to make cuttings, and I do, too). In bloom it's a "heart-clutcher" favorite of mine *Senecio stapeliiformis* has sent up three new stems at edge of pot. Limited space handicaps a prolific underground stem growth. Rests just after blooming then sends up new growth.

September 16. *Zygocactus truncatus* (Thanksgiving Cactus) budded. Dry spell or rather limited waterings mean buds. Invariably appear by the 20th of September. Bloom any place between October 31 and November 15th during a normal year. May bloom a second time in January, but for me this is a very rare occasion. "Crab Claw" it is called in West Virginia where I got mine.

September 19. Cleveland Shopping News came with my article "Culture and Care of Succulents" of September 9th issue. Part of a series sponsored by the Cleveland Garden Center. Publicity chairman is limited to newspapers here since the Garden Center has

gone out 100% over the radio for Victory Gardens. Staged a one-man exhibit for Biology class to illustrate "Cacti and Their Adaptation to Adverse Conditions." Students asked more "wise questions" than their elders usually do. Among the plants displayed were *Echinocactus LeContei*, *Ariocarpus fissuratus*, *Homalocephala texensis* and *Astrophytum myrionostigma*. Twenty or more classmates of Colista came to see three *Hylocereus undatus* blooms. Enthralled! But so was I. What would we have been if we'd have seen that Hawaiian wall with 5000?

September 21. First day of fall. Professor Otto La Porte, Ann Arbor, Michigan, telephoned he's be in Lorain next Monday. Welcome news. *Kleinia odora* has three fine shoots. A stiff stemmed *articulata* set "red signals" on my watering impulse for remainder of year. Spiny types get very little water once a week from now on (back in green house, by the way). Euphorbias which usually "slow up" during July, August and September have resumed growth so they will be watered freely until November, then thoroughly once a week.

September 25. 39° on back porch this morning. Closed ventilators on greenhouse last night. Hardier plants still under grape arbor. Professor La Porte here at 5 p. m. "bearing gifts," all rarities. Studied plants in greenhouse and under arbor. Several Echinopses still developing nice buds. *Epiphyllum carthagense, darrahii* and *Ackermannii* in bloom. Had leisurely dinner at a local restaurant. Discussed hybridization of Euphorbias (La Porte is a Euphorbiophile), my column and general plant culture. Discussed heating problems and decided oil heat was nice but war restrictions were not. Congenial? Sure, but are not all cactophiles good company?

September 27. Scraped whitewash off sides of greenhouse. The rain washed it partly off the roof. Will all be off as soon as first freeze is here. Hardy *Opuntia* stems shrinking in spite of fall rains. Getting ready for freezing weather. Sap is so concentrated, acts as its own anti-freeze. Fruits vary from one to two inches in diameter and from reddish-green to purple in color. There are wide variations in *O. compressa*. I have them from Charles Cole (K.I.O.), Mrs. William Chapin (Stone Mountain collected), Walter Milsen (Sandusky, Ohio, collected) and Wisconsin—Minnesota specimens (1941 convention collected). All *O. compressa* but blooms vary from very large brick-red centered, yellow to pure golden yellow (my favorite).

September 30. Read article about receding ice cap at North Pole. Ice weight increasing at South Pole. Eventually shifting equator will again be near Labrador. Tracers of geology of cacti claim such an upheaval made them what they are today. What will happen now, I wonder? Nothing as interesting as my cacti, you can bet.

Dear Diary: Please keep my readers on their toes to keep the bugs off their cacti and succulents. I plan to check each plant and spray before October.

J. E. J.

Mrs. MacCallum reports the death of Gustaf H. Stark, Swedish-born engineer and hobbyist in botany, who died at the age of 72 in Phoenix, Arizona.

As the founder and first president of the Arizona Cacti and Native Flora Society, Mr. Stark was instrumental in the creation of the botanical gardens in Papago Park.

It was to these gardens that enthusiastic Mr. Stark donated his huge collection of more than 700 species of cacti, collected over a period of several years.

His contributions to the gardens were never-ending through constant trading with hobbyists in every nation of the world and by personal botanical expeditions into Arizona environs.



SPINE CHATS

LADISLAV CUTAK



The cactus world is saddened by the death of another illustrious son. This time it is the renowned Maltese botanist, Prof. John Borg, whom you will remember as the author of "CACTI. A Gardener's Handbook for Their Identification and Cultivation," published in 1937. Professor Borg passed from the earthly scene on May 4 last, but because of war conditions in Europe, I did not learn of his death until last month. This well known scholar spent many years in Malta where he formerly was superintendent of agriculture and director of the Botanic Garden, which posts he gave up in 1933. In spite of his retirement from official duties he kept up his interests in botany and agriculture up to his very death.

Malta, stronghold of the Knights in the days of the Crusades, has maintained her strategic position for centuries. It guards the busy marine highway between Gibraltar and Suez and in the early days of World War II was the most bombed place, because Valetta, the capital with its spacious harbor, was most valuable to Great Britain as refueling and repair station. The island is only 17½ miles long and nowhere more than 9 miles wide. In spite of the stony nature of its land the Maltese are skillful and industrious farmers extracting the utmost from the soil, despite methods still somewhat primitive. John Borg came to this Mediterranean outpost and made his name there in the field of agriculture and horticulture. He published accounts of his research on the cultivation and diseases of fruit trees, on vines and other subjects, both in the English and Maltese languages. Besides his popular book on cacti he also authored the scholarly 846-page book on the Flora of the Maltese Islands. Borg also assembled a large collection of cacti and succulents which have been bequeathed to the Argotti Botanic Gardens. He has added three new names in the *Cactaceae* by describing two new species and one variety of *Opuntia*, namely *O. neuquensis*, *O. securigera* and *O. Verschaffeltii* var. *floribunda*. For a review of his Cactus book I refer you to the March, 1938, CACTUS JOURNAL, page 151.

Mr. C. W. Botkin, chemist at the New Mexico Agricultural Experiment Station, has another interesting and enlightening article on the Utilization of Fiber of Desert Plants in The Chemurgic Digest (July 15, 1945). In it he states that the leaves of *sacahuiste*, *Nolina microcarpa*, have been used satisfactorily in the making of long, rather stiff brooms for street cleaning, because the dry leaves of the *Nolina*, when split lengthwise, make an elastic whisk fiber suitable for heavy brushes and brooms. *Sacahuiste* or bear grass is abundant on the sandy hills of central and southern New Mexico and it is claimed that the native supply is much in excess of the requirement for brooms. One acre may produce 3½ to 7 tons of dry leaves and leaves in that condition contain about 48% of fiber. Mr. Botkin also makes mention of *Yucca glauca*, another close relative which has become useful during the war. The plants were cut with an axe, dried in the field, baled like hay, shipped to a paper mill in the East, where the fiber was extracted and made into a special paper for the Navy. A bale roughly weighed about 300 pounds and yielded about 40% of paper pulp.

Mr. G. W. Reynolds, who is regarded as the foremost living authority on Aloes, is now actively engaged in the final writing-up of his book on the South African Aloes, which, as we are informed, will be a work ranking with the best monographs and should take its place alongside of THE STAPELIEAE and THE SUCCULENT EUPHORBIEAE of Messrs. Alain White, Boyd L. Sloane and collaborators. This valuable book will be copiously illustrated by photographs which the energetic Reynolds took on his many excursions in search of Aloes in the wild state. Readers of the CACTUS JOURNAL were told of this proposed new monograph as far back as 1936, so it goes to show that monographs are not written in a day or even a year, especially when they deal with a complicated group as the *Aloe* is. Before a work like that is undertaken many perplexing problems must be solved, lost records re-established and field trips organized to gain first-hand knowledge of the plants. During these many years, Mr. Reynolds has scoured the South African countryside, acquired valuable knowledge and discovered many new species. Now we are all anxious to share in the fruits of his labors and experience and wish him Godspeed towards the completion of his much-awaited book. * * *

We learn from the Journal of the Botanical Society of South Africa that the Karroo Garden at Whitehill, which was established 24 years ago for the cultivation and study of the flora (especially the succulent plants) of the arid districts of the Union, will be moved to a new location near Worcester, where the municipal authorities have offered a suitable piece of Karroo land for this purpose. The original Whitehill garden occupied an excellent site, especially to soil and climate, but it also had the disadvantage of remoteness, which has made the working of the Garden very difficult and has restricted public interest. The removal of the main road to a distance of about three miles from the Garden has now forced the abandonment of Whitehill to a new and more convenient site at Worcester. * * *

Professor W. L. Howard of the University of California has issued a 110-page historical study (Bulletin 691, March, 1945) of all the plant contributions made by Luther Burbank, the great plant wizard, who during his working lifetime (1873-1926) probably contributed or introduced more plants than any other single American in our history. It is doubtful whether the exact number of Burbank's introductions will ever be known, since he left no systematic account of them. The present study of Prof. Howard has been chiefly centered upon his introductions as announced in catalogs and price lists. We were much interested in the paragraphs dealing with the fruiting types of *Opuntias* (pp. 11-14) and also those with the forage types (pp. 42-46). As you know, Burbank maintained a huge collection of *Opuntia* species which he publicized greatly, especially those which he believed would make excellent cattle feed on dry ranges but partly because of his super enthusiastic claims he loosed a flood that left disillusion and sometimes downright fraud in its wake. Though often severely criticized, he, nevertheless, can be counted as one of the great, but unique, men of horticulture.

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BOOK NOTES**THE STAPELIEAE**

The three-volume monograph on the Stapeliaceae includes 1 new genus, 30 new species, 25 new combinations, 3 new sections, with descriptions, and complete illustrations of 349 species. Assembles and brings up to date all the information regarding these plants which are found chiefly in South Africa. The descriptions and the clear arrangement are such that the unscientific can understand them.

The three volumes contain 1200 pages with 1250 illustrations and 39 color plates. This \$30,000 monograph is sold practically at cost in order to create interest in these plants. Bound in durable cloth, per set.....\$12.50

Postage in U.S.A. 40c. Foreign \$1.50.

THE MAMMILLARIA HANDBOOK—Dr. R. T. Craig. \$7.50. Postage in U.S.A. 15c, foreign 50c.

Order now. Check your plants. This new monograph on Mammillarias contains 400 pages bound in heavy buckram and the same size as the smaller edition of the Britton and Rose Reprint. There are 236 species fully described and illustrated with 300 photographs.

WHAT KINDA CACTUS ISZZAT? by Reg Manning, famous cartoonist of the Southwest. This 100 page book is packed with humorous cactus drawings which are based on hundreds of interesting facts. For amusement and information, this book is unique. Ideal as a gift book for those who hate or enjoy cacti. Cloth bound \$1.30 postpaid.

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Binding the JOURNALS is still delayed because the cloth has not arrived. We regret this delay, especially so because the material was promised 60 days ago.

The Editor reserves the right to accept or reject advertising

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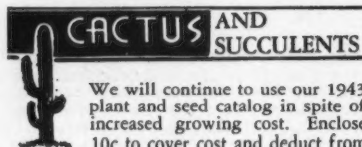
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